To be used with:
Layer Away

Name _____

Soil Composition

Conduct the following measurements to find out what type of soil you have. Record all heights in centimeters.

1. Measure the total height (amount of soil in your jar). Total Height: _____ cm

2. Measure the amount of sand (bottom layer). Sand: _____ cm

3. Measure the amount of silt (second layer). Silt: _____ cm

4. Measure the amount of clay (the top layer). Clay: _____ cm

Now take measurements for the sand, silt, and clay and turn them into percentages. The percentages will tell you how much sand, silt, or clay is present compared to the total amount of soil in the jar. To figure out the percentages of each, take your amount of sand (or silt or clay) and divide the number by the total amount of soil in the jar. Then multiply this number by 100 to get the percentage of sand in your jar. Round your percentages to the nearest whole number.

Here is an example:

You have 2.5 cm of sand in your jar. The total amount of soil in your jar is 7 cm.

Step 1: Divide the amount of sand by the amount of soil.
2.5 cm ÷ 7 cm = .357

Step 2: Multiply the number by 100 to figure the percent.
.357 x 100 = 35.7

Step 3: Round your answer
35.7 rounded = 36% sand

5. Sand: _____ cm

cm = _____ x 100 = _____ % Sand = _____ %

6. Silt: _____ cm

cm = _____ x 100 = _____ % Silt = _____ %

7. Clay: _____ cm

cm = _____ x 100 = _____ % Clay = _____ %

8. Now add your three percentages together. They should equal 100%.

_____ % Sand + _____ % Silt + _____ % Clay = _____%